

Diablo Canyon Independent Spent Fuel Storage Installation (ISFSI)
License Amendment Request No. 2

Purpose: Discuss whether Amendment 1 to the Diablo Canyon ISFSI license represents a genuine issue requiring the NRC to give the public an opportunity for a hearing.

Outcome: Form an SFST determination on whether the amendment represents a Genuine Issue.

Process:

Regulatory basis - 72.46, "Public hearings"

- a. 72.46 (b)(1) states, "In connection with each application for an amendment to a license under this part, the Commission shall, except as provided in paragraph (b)(2) of this section, issue or cause to be issued a notice of proposed action and opportunity for hearing in accordance with § 2.105 or § 2.1107 of this chapter ..."
- b. 72.46(b)(2) states, "The Director, Office of Nuclear Material Safety and Safeguards, or the Director's designee may dispense with a notice of proposed action and opportunity for hearing or a notice of hearing and take immediate action on an amendment to a license issued under this part upon a determination that the amendment does not present a genuine issue as to whether the health and safety of the public will be significantly affected. After taking the action, the Director or the Director's designee shall promptly publish a notice in the Federal Register of the action taken and of the right of interested persons to request a hearing on whether the action should be rescinded or modified."

The application requested that Materials License No. SNM-2511 be amended to provide:

1. Changes to Technical Specifications (TS):

- a. TS 1.1, "Definitions," is revised to include terms in support of high burnup fuel (HBF) selection criteria and the addition of neutron source assemblies (NSAs), and instrument tube tie rods (ITTRs).
- b. TS 2.0, "Approved Contents," is revised in Tables 2.1-1 through 2.1-10 in support of HBF selection criteria and the addition of NSAs, and ITTRs.
- c. TS 2.0, "Approved Contents," is revised to add new TS 2.3 and associated Table 2.3-1 to provide alternative calculations for burnup limits for fuel assemblies in a Multi-Purpose Canister (MPC)-32 to allow selection of HBF.
- d. TS 3.1.1, "Multi-Purpose Canister (MPC)," is revised to eliminate the vacuum drying option, which is not allowed for HBF, and to add a reference temperature of 70°F for the MPC Helium backfill pressure range.
- e. TS 3.1.2, "Spent Fuel Storage Cask (SFSC) Heat Removal System," is modified to allow the HI-STORM to be considered operable with up to 50 percent vent blockage (although removal of any blockage is still required on discovery).

- f. TS 3.1.4, "Supplemental Cooling System," is added to provide the conditions and criteria for the supplemental cooling system (SCS). This change requires an exemption from the requirements of 10 CFR 72.236(f).
 - g. TS 4.1.2b, "Design Features Important to Criticality Control," is revised to change the B4C content in METAMIC to 33.0 wt%.
 - h. TS 5.1.3b, "MPC and SFSC Loading, Unloading, and Preparation Program," is revised to delete the requirement for maintaining the annulus full during vacuum drying and to restore the requirement for maintaining the annulus full during reflood (unloading).
2. Revision of the licensing basis as documented in the DC ISFSI Final Safety Analysis Report Update (FSARU) to:
- a. upgrade the thermal analysis methodology to a three dimensional (3D) Computational Fluid Dynamics (CFD) model,
 - b. remove the requirement for 100% fuel failure coincident with 100% vent blockage,
 - c. change of some allowed component temperatures in the thermal evaluation (peak cladding, concrete, overpack metal, transfer cask lid neutron shielding),
 - d. reduce the required torque criteria for the MPC lift cleats, and
 - e. add design criteria for the SCS including a new accident for loss of SCS.
3. An exemption from the requirements of 10 CFR 72.236(f) to allow use of a nonpassive SCS.

Prior amendments that did not pose a genuine issue

- a. Calvert Cliffs – adds NUHOMS-32P canister to the license (amendment to SNM-2505, 2003)
 - i. The 32P canister is similar to the 32PT canister, which is included in CoC 72-1004 (32P canister is not included in 72-1004).
- b. Calvert Cliffs – increased design basis limit for the canister from 50 to 100 psig (amendment to SNM-2505, 2005)
 - ii. Calvert Cliffs uses the 32P canister, not a certified design, but similar to the 32PT canister that is part of CoC 72-1004
- c. Rancho Seco amend 2 – addition of Greater than Class C Waste
- d. Prairie Island – the addition of burnable poison rod assemblies and thimble plug devices for storage in the TN-40, a canister design specific to Prairie Island
 - iii. Latest amendment for adding higher enrichment and higher burnup fuel has not yet been noticed, but will be noticed as a genuine issue
- e. Humboldt Bay – amendment to decrease the minimum fuel enrichment from 2.09% to 2.08%; based on a transcription error from the calculation to the TS

SFST position: This amendment does not present a Genuine Issue.

- a. Few changes that were not previously submitted as an amendment to the HI-STORM CoC No 1014. Some changes provided to improve margins to safety.

- b. SECY-99-175, "Proposed Rule: 10 CFR Part 72 – Clarification and Addition of Flexibility" forwarded a proposed rulemaking amending Part 72 to eliminate the necessity for repetitious reviews of cask design issues that the Commission previously considered during approval of the cask design, and stated the staff position that "... previously reviewed and approved cask designs should be excluded from the scope of a license hearing."
 - iv. Public had the right to comment on the adequacy of the cask design during the Subpart L approval process
 - v. Public still has the option to petition under 2.206 to raise new safety issues
 - vi. Rereview of cask design issues which have been previously resolved are an unnecessary regulatory burden on applicants causing unnecessary expenditure of staff and hearing board resources

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